

What is claimed is:

1. A wheel assembly for a motorcycle, said wheel assembly comprising:
a wheel axel carried by said motorcycle;
a brake hub rotatably carried by said wheel axel;
5 a tire hub rotatably carried by said brake hub for carrying a tire; and
said brake hub and said tire hub constructed and arranged to rotate in
opposite directions about said wheel axel;
whereby, rotation of the brake hub in a direction opposite of said tire hub
rotation creates a counter-rotational gyroscopic force that cancels the gyroscopic
10 force created by the tire hub rotating in the opposite direction.
2. The wheel assembly of claim 1 including a transfer gear disposed
between said brake hub and said tire hub for interconnecting said brake hub and
said tire hub to cause said brake hub and tire hub to cooperate to rotate in opposite
directions.
- 15 3. The wheel assembly of claim 2 wherein said brake hub includes a
center gear engaging said transfer gear; and said tire hub including a ring gear
engaging said transfer gear so that rotation of said tire hub in a first direction causes
said ring gear to rotate said transfer gear, which causes said transfer gear to rotate
said center gear of said brake hub to rotate said brake hub in a direction opposite to
20 said first direction of said tire hub.
4. The wheel assembly of claim 1 including at least one brake disc
carried by said brake hub for rotating in the direction of said brake hub about said
wheel axel to provide increased mass rotating in a direction opposite of said tire hub

to increase a counter-rotational gyroscopic force to cancel the gyroscopic force created by rotation of the tire hub.

5. The wheel assembly of claim 2 wherein said brake disc is operatively associated with a braking mechanism carried on said motorcycle for stopping
5 rotation of said brake disc and thereby said brake hub and said tire hub.

6. A wheel assembly for the front wheel of a motorcycle having a front steering fork carrying a wheel axel, said wheel assembly comprising:

a brake hub rotatably mounted to said axel;

a brake disc carried by said brake hub for rotating in the direction of said
10 brake hub;

a braking mechanism for engaging said brake disc to stop rotation of said brake hub;

a tire hub rotatably carried by said brake hub for carrying a tire; and

a transfer gear interconnecting said brake hub and said tire hub so that
15 rotation of said tire hub in a first direction causes said transfer gear to counter-rotate said brake hub in an opposite direction to said tire hub;

whereby counter-rotation of the brake disc carried by the brake hub creates a counter-rotational gyroscopic force which cancels out the gyroscopic force created by rotation of the tire and tire hub in the first direction.

20 7. The wheel assembly of claim 6 wherein said brake hub includes a center gear, and said tire hub including a ring gear; said transfer gear disposed between said center gear and said ring gear for cooperating with said center gear

and said ring gear to cause said brake hub to rotate in a direction opposite of said tire hub when said tire hub is rotated.

8. The wheel assembly of claim 7 including a first brake disc mounted to a first side of said brake hub, and a second brake disc mounted to a second side of said brake hub; said first and second brake discs providing increased mass rotating together with said brake hub in a direction opposite of said tire hub to increase said counter-rotational gyroscopic force to cancel the gyroscopic force created by rotation of the tire hub.

9. In combination, a wheel assembly and a motorcycle, said wheel assembly comprising:

a steering fork carried by said motorcycle having a first prong laterally spaced from a second prong;

an axel having a first distal end carried by said first prong, and a second distal end carried by said second prong;

15 a brake hub rotatably mounted to said axel having a plurality of brake hub bearings disposed between said axel and said brake hub to promote rotation;

a brake disc affixed to said brake hub rotating with said brake hub;

a braking mechanism carried by said steering fork for engaging said brake disc and stopping rotation of said brake disc and said brake hub;

20 a tire hub rotatably carried by said brake hub having a plurality of tire hub bearings disposed between said brake hub and said tire hub to promote rotation;

a tire carried by said tire hub for contacting a road surface to rotate said tire hub;

a transfer gear disposed between said tire hub and said brake hub for interconnecting said brake hub and tire hub;

a center gear carried by said brake hub for engaging said transfer gear, and
a ring gear carried by said tire hub for engaging said transfer gear so that rotation of
5 said tire hub caused said transfer gear to counter-rotate said brake hub;

whereby, counter-rotation of the brake disc carried by said brake hub creates
a counter-rotational gyroscopic force that cancels out the gyroscopic force created
by rotation of the motorcycle tire and tire hub.

10. The wheel assembly of claim 9 wherein said braking mechanism
10 includes a brake caliper fixedly mounted to said steering fork; said brake caliper
operatively associated with said brake disc for stopping rotation of said brake disc
and thereby said brake hub and said tire hub.

11. The wheel assembly of claim 9 including a first brake disc mounted to
a first side of said brake hub, and a second brake disc mounted to a second side of
15 said brake hub to provide increased mass rotating in a direction opposite of said tire
hub to increase said counter-rotational gyroscopic force to cancel the gyroscopic
force created by rotation of the tire hub.

12. A wheel assembly for the front wheel of a motorcycle having a front
steering fork carrying a wheel axel, said wheel assembly comprising:

20 brake hub means rotatably mounted to said axel;

tire hub means rotatably mounted to said brake hub means for carrying a tire;

and

rotational transfer means operatively associated with said brake hub means and said tire hub means for causing said brake hub means to spin in a counter-rotational direction to said tire hub means;

whereby counter-rotation of the brake hub means cancels out gyroscopic
5 forces created by rotation of said tire hub means.

13. The wheel assembly of claim 12 including braking means operatively associated with said brake hub means for stopping rotation of said brake hub means.

14. The wheel assembly of claim 12 including gear means carried by said
10 tire hub and said brake hub for cooperating with said rotational transfer means to rotate said brake hub in a direction opposite from said tire hub.